

**VILLAGE OF DOWNERS GROVE**  
**Report for the Village Council Meeting**

**10/20/2015**

<b>SUBJECT:</b>	<b>SUBMITTED BY:</b>
Municipal Code Amendments Chapter 7, Chapter 8, Chapter 10, Chapter 16	Stan Popovich, AICP Community Development Director

### **SYNOPSIS**

Ordinances have been prepared amending the following Chapters of the Downers Grove Municipal Code:

- Chapter 7 – Buildings
- Chapter 8 – Business and Activity Licenses and Regulations
- Chapter 10 – Electricity
- Chapter 16 - Plumbing

### **STRATEGIC PLAN ALIGNMENT**

The Goals for 2011-2018 include *Exceptional Municipal Services*.

### **FISCAL IMPACT**

N/A

### **UPDATE & RECOMMENDATION**

This was discussed at the October 13, 2015 Village Council meeting. Based on Council discussion staff contacted other DuPage County municipalities. Of the 21 contacted, 19 allow Type III construction and two prohibited Type III construction (Elmhurst and Bloomingdale), allowing only Type I and Type II.

Attached are staff responses to additional Council questions.

Staff recommends approval on the October 20, 2015 Active Agenda.

### **BACKGROUND**

One of the high priority projects staff identified for 2015-2017 is to Review the Building and Development Permitting Process. One of the elements of this project was to review local amendments for improvement or elimination, while also creating a more business friendly environment. The following key concepts and strategies are the goals in this ongoing effort:

- Align the Village's regulations with comparable communities.
- Maintain long standing and recognized fire safety regulations.

- Provide code provisions that address local construction practices.
- Reduce the number of local amendments in order to follow the baseline codes representing recognized industry standards.

Key changes are summarized below.

### **Chapter 7 – Buildings.**

#### **Amendments to the 2006 International Building Code**

These amendments pertain to construction type and fire protection measures, as summarized in the table below.

<b><u>Current Code Requirements (Local Amendment)</u></b>	<b><u>Proposed</u></b>
Considers parking garages to be subject to requirements for high-rise buildings for fire protection	Open parking garages (not walled in) are exempt from high-rise fire protection measures
Restricts use of Type III construction by zoning district and also reduced allowable height. Does not place fire protection restrictions on I-joists and open web wood trusses.	Allows Type III construction in all zoning districts, subject to fire protection measures. Allows I-joists and open web wood trusses only if rated for 1-hour fire resistance.
Requires Utility/Miscellaneous structures to have sprinklers if over 1,500 S.F.	Requires sprinklers for such structures only if over 5,000 S.F.
Requires all alarm systems to be upgraded to a system that would identify individual alarm locations on the alarm board (known as an ‘addressable’ alarm system)	Requires addressability only in new systems.

### **Chapter 10 – Electricity**

#### **Amendments to eligibility to receive an electrical permit.**

- Permits for electrical work in the Village will continue to be issued only to qualified persons.
- The proposed amendment revises these qualifications to allow any of the following: An electrician's license issued by a unit of local government in the State of Illinois; Successful completion of an electrical exam issued by an approved agency; Other qualification documentation deemed acceptable by the Building Official, including a valid 2016 Downers Grove Electrical License.

### **Chapter 8 – Business and Activity Licenses and Regulations**

- Eliminate Village licensing for electrical contractors effective December 31, 2015. Existing licenses can be renewed and will remain valid through December 31, 2016. The safety and quality of electrical work in the Village will continue to be ensured through the permitting and inspection process codified in Chapter 10 of the Village Municipal Code.

### **Chapter 16 – Plumbing**

## **Amendments to Illinois Plumbing Code to comply with State Law Conservation requirement**

- 17 Ill. Adm. Code 3730.307 requires evidence of adoption of specific water conservation efforts by all Lake Michigan water permittees. One of these required conservation practices is adoption of ordinances requiring that new and replacement plumbing fixtures and irrigation controllers be a labeled WaterSense product, as specified by the USEPA.
- The proposed amendment will revise the current Illinois Plumbing Code to mandate this requirement and will be enforced on all applicable building permits.
- The USEPA states that WaterSense Products perform as well or better than their less efficient counterparts; are 20 percent more water efficient than average products in that category; realize water savings on a national level; and provide measurable water savings results.

## **ATTACHMENTS**

Ordinance  
WaterSense Program description from USEPA website

**VILLAGE OF DOWNERS GROVE**  
**COUNCIL ACTION SUMMARY**

**INITIATED:** Community Development      **DATE:** October 20, 2015  
(Name)

**RECOMMENDATION FROM:** n/a      **FILE REF:** \_\_\_\_\_  
(Board or Department)

<b><u>NATURE OF ACTION:</u></b>	<b><u>STEPS NEEDED TO IMPLEMENT ACTION:</u></b>
<input checked="" type="checkbox"/> Ordinance	Motion to adopt "AN ORDINANCE AMENDING ELECTRICAL QUALIFICATION REQUIREMENTS", as presented.
<input type="checkbox"/> Resolution	
<input type="checkbox"/> Motion	
<input type="checkbox"/> Other	



**SUMMARY OF ITEM:**

Adoption of this ordinance shall amend electrical qualification requirements.

**RECORD OF ACTION TAKEN:**

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Elec Testing

**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE AMENDING ELECTRICAL QUALIFICATION REQUIREMENTS**

BE IT ORDAINED by the Village Council of the Village of Downers Grove in DuPage County, Illinois, as follows: (Additions are indicated by **shading**/underline; deletions by **strikeout**):

**Section 1. That Section 10.301. is hereby amended to read as follows:**

**10.301. Permit to install electrical equipment--Required prior to commencing work; persons eligible.**

(a) No person shall install, alter or repair any electrical conduits, electrical wires, equipment or apparatus in any building or structure for which a permit is required until such permit shall have been secured.

(b) Persons who may perform work authorized by a permit issued pursuant to the provisions of this Chapter are the following:

(1) Electrical contractors and technicians **having the necessary qualifications, training, experience and technical knowledge to do electrical work as evidenced by:** 1) a valid electrical license issued by a governmental entity located within the State of Illinois that administers tests consistent with standards of the National Electrical Code; or 2) proof of successful passage of an electrical examination consistent with the standards of the National Electrical Code; or 3) other documentation deemed acceptable by the Building Official who have satisfied the requirements of Sections 8-35 through 8-39 of the Municipal Code.

(2) A qualified home owner, provided that such permit shall be only for electrical work on residential premises owned and occupied by the home owner, and further provided that he/she has sufficient knowledge and technical training to perform the installation, alteration, repair and maintenance of electrical wiring and equipment authorized by the permit **as evidenced by proof of successful passageing of an electrical examination written test given by the Community Development Department with a minimum score of seventy percent correct consistent with the standards of the National Electrical Code.** (Ord. No. 662, § 11; Ord. No. 2871, § 2.)

**Section 2.** That all ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

**Section 3.** That this ordinance shall be in full force and effect from and after its passage and publication in the manner provided by law.

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Mayor

Passed:

Published:

Attest: \_\_\_\_\_

Village Clerk

## Staff Responses to Council Questions

*Beyond fire life safety, my questions regarding type III include*

- *Longevity and the ability to maintain value over several decades*
- *Soft "squishy" floors*
- *Sound proofing*
- *Increased risk of total loss in the event of a smallish fire"*

*Longevity and the ability to maintain value over several decades*

As materials go, concrete and masonry are expected to last longer than wood; however the longevity and value of a building over time is more often a case of functional or aesthetic obsolescence than degradation of the actual materials. Buildings are typically demolished not because their materials have become structurally unsound but rather because there is an economic redevelopment desire for a new building to take its place that represents a higher and better use of the available land.

*Soft "squishy" floors:*

Section 1604.3 of the Building Code limits the allowed deflection, or bounce, of a floor. The bounce that may be felt in a floor assembly is a product of the deflection or bending of the structural floor member. Lighter weight structural floor members bounce more than heavier ones. Wood members bounce more than lightweight steel joists, and lightweight steel joists bounce more than reinforced concrete floor slabs. Regardless of the material used, floors must fall under the maximum permitted bounce in Section 1604.3 of the code.

*Sound proofing:*

Staff does not expect the type of construction to significantly affect soundproofing performance. Soundproofing of both Type II and Type III buildings should be very similar. Section 1207 of the Building Code limits the amount of sound transmission. Sound transmission through walls and floors is regulated between adjacent dwelling units and between dwelling units and public spaces. Regardless of the construction type, the same sound transmission standards must be met. There are two types of sound transmission that are regulated: air-borne sound and structure-borne sound. Each has different standards to be met. In general, air-borne sound (loud music) travels easier through lighter weight assemblies like wood or metal stud walls while structure borne sound (heels on a floor) travels easier through denser assemblies like concrete floors. The inclusion of a sound insulating material in the cavity of wall, floor and ceiling assemblies is the primary method for achieving compliance with the sound transmission standard.

*Increased risk of total loss in the event of a smallish fire:*

While the risk of property damage due to fire is less in Type II buildings than in Type III, the risk of a total loss in the event of small fire is extremely low in both construction types when fire sprinklers are installed. Fire sprinklers are required to be installed in both Type II and Type III buildings pursuant to Village Code.

By definition the Construction Types represent the level of resistance to fire. Type I is therefore the most fire-resistant and Type V is the least. Automatic fire sprinklers greatly enhance the ability of a structure, of any construction type, to withstand fire and prevent total loss. Automatic fire sprinklers are required in all residential, assembly, institutional, and hazardous uses regardless of size of structure. Business uses over 1,500 square feet would require sprinklers as would all other uses over 2,500 square feet. The only exception is the proposed increase to 5,000 square feet for Utility and Miscellaneous structures. The additional fire protection measures being proposed on wood trusses and wood I-joists would further mitigate the risk of total loss by giving more time for fire fighting efforts.